

## ABSTRACT

In a method of operating a production plant comprising at least one unit (3) for treating at least one gas mixture, said unit delivering at least one fluid to a consumer (2) and being supplied with electricity:

- the treatment unit is operated during periods in which the cost of electricity is above a first predefined threshold and during periods in which the cost of electricity is below a second predefined threshold, the first threshold being greater than or equal to the second threshold;

- during at least one period in which the cost of electricity is below the second threshold, at least one portion of the fluid is stored, in liquid and/or gaseous form, in at least one storage tank (9);

- during at least one period in which the cost of electricity is above the first threshold, the fluid is delivered to the consumer from at least one storage tank after a vaporization step if it is stored in liquid form; and

- during at least one period in which the cost of electricity is below the second threshold, at least one fluid is produced, with a predefined purity, a predefined flow rate, a predefined temperature and a predefined pressure, in the treatment unit, and

- during at least one period in which the cost of electricity is above the first threshold, the power consumption of the treatment unit is reduced and the fluid is produced with a purity below the predefined purity and/or a flow rate below the predefined flow rate and/or a temperature below the predefined temperature and/or a pressure below the predefined pressure.